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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,815	11/22/2002	Ivett Alejandra Leyva	125466	9641

7590 12/29/2004
SUGHRUE MION PLLC
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EXAMINER

SUKMAN, GABRIEL S

ART UNIT	PAPER NUMBER
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3641

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,815

Applicant(s)

LEYVA ET AL.

Examiner

Gabriel S. Sukman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-31 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The reply filed on 13 October 2004 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): the elected claims are directed to non-elected species (see below). See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**

The reply to the Office Action is not responsive because the assertion of the Applicant that "the distinction between species i and ii with respect to Claims 1-4, 6-10, 13-20 and 26-29 is artificial," when taken in view of the disclosure, is not believed by the examiner to be correct nor supported.

As a preliminary matter, the specification continually and exclusively makes mention of the subject matter depicted in figures 3 and 12 (and 6) as being separate and independent embodiments of the invention. Nowhere in the specification or drawings is there any representation that the particular features highlighted by each of figures 3 and 12 (and 6) can be utilized together, but are repeatedly referred to as "alternative embodiments." Further, each of those features (i.e., the hinge pivotable PDE, the PDE flap, and the PDE in airfoil flap) are all designed for the specific purpose of altering thrust and each operate in distinct fashions, thus rendering any configuration that utilizes any two of those features together to be technically illogical, support in the

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disclosure notwithstanding. Therefore, each of the species i, ii, and iii, identified in the previous action, are considered to be distinct, mutually exclusive, embodiments of the invention and any claim that specifically reads on a feature of one of the embodiments cannot read on any of the others. See MPEP § 806.04(f).

It is therefore understood that the language in provisionally elected claim 1, "wherein at least one of said pulse detonation engines is movably configured," cannot read on the embodiment of figure 12 in which the PDE is not movably configured but instead incorporates a movable flap at its aft end for thrust vectoring. This claim is in accordance with the provisional election of species i, the point here being made for purposes of consideration in Applicant's response to this action.

Accordingly, the language in provisionally elected claim 3, "wherein said [airfoil trailing edge] flap is movably configured to alter a direction of the thrust forces relative to said airfoil," is specifically directed to the species depicted in figure 6 and thus cannot read on either of figures 3 or 12. This claim is therefore not in accordance with the provisionally elected species since it does not read on figure 3, the elected species.

Provisionally elected claim 14 is clearly not in accordance with the provisionally elected species since it depends from non-elected claim 13, which is directed to non-elected species a.

Provisionally elected claims 6-10 and 16-20 are in accordance with the provisionally elected species.

The restriction requirement between claims 1-29 and claims 30-31 is withdrawn in view of the amendments to claims 30 and 31.

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With regard to Applicant's arguments that the search and examination can be made without a serious burden due to the closely related nature of the species, the examiner points out that a determination of a burdensome search or examination is not a prerequisite to a proper requirement for election of species when distinct species are claimed. See MPEP § 808.01(a). The examiner must withdraw the requirement, however, if the Applicant submits that the distinct species are clearly unpatentable over each other.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel S. Sukman whose telephone number is (703) 308-8508. The examiner can normally be reached on M-F, 8:30-6:00, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gss



PETER M. POON
SUPERVISORY PATENT EXAMINER

12/27/04